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*Submitted Online via Environmental Registry of Ontario (ERO) website*

Dear George,

**RE: Proposed amendments to the Director’s Technical Rules made under section 107 of the Clean Water Act, 2006 (ERO # 019-2219)**

Thank you for the opportunity to provide comments on the Provincial proposal to update the Director’s Technical Rules made under section 107 of the Clean Water Act, 2006. On August 11, 2020, the Ministry of the Environment, Conservation and Parks (MECP) released a policy proposal paper on the Environmental Registry (ERO # 019-2219) recommending updates to the technical rules for assessing source water protection vulnerability and risk under the *Clean Water Act* to ensure that the quality of Ontario’s drinking water continues to be protected and that source protection efforts are supported by current science.

The public comment period for the proposed changes is open until November 9, 2020. The proposal paper and supporting material can be found on the Environmental Registry of Ontario (<https://ero.ontario.ca/notice/019-2219>).

In the policy proposal the MECP proposed updates to the Director’s Technical Rules that will:

- reduce administrative burden for local decision-makers while maintaining technical rigour
- provide clarity on the information required to evaluate whether drinking water systems are vulnerable to climate change impacts
- clarify the intent of the rules around local threats are to be focused on activities that do not already require provincial or federal approval

- adopt an evidence-based approach to delineating geographic areas where activities are cumulatively having a negative affect on the quality of drinking water
- address administrative matters through minor clarifications and typographical corrections
- clarify the Tables of Drinking Water Threats contained in the rules, which set out the circumstances under which prescribed activities pose a drinking water threat, to support plan implementation and a better understanding of the risks to drinking water

Lake Erie Region (LER) Source Protection staff have been working with partner municipalities through the LER Implementation Working Group (IWG) along with the LER Source Protection Committee members to review the proposed changes.

The LER Source Protection Region staff support updating the Director's Technical Rules to support municipalities and the source protection authorities in keeping assessment reports and source protection plans up to date to ensure they remain relevant, as well as support the implementation of source protection plans.

### **General Comments on Proposed Director Technical Rules**

The LER Source Protection staff seek more clarity with respect to the following:

- Details on which amendments are mandatory and which are enabling,
- Specific timelines for compliance with the new Technical Rules,
- Details on which amendments will be funded under the Drinking Water Source Protection program, and
- For changes that are mandatory, what organizations will complete the work and how staff time will be funded.

### **Gaps Identified in the Proposed Director Technical Rules**

#### Vulnerability and Risk Assessments

The *Clean Water Act, 2006* (CWA) provides a limited framework to address the vulnerability side of the risk equation (hazard x vulnerability = risk) resulting in minimal opportunities to proactively address activities on the landscape that could affect/change the vulnerability of a well or intake. Examples of activities that would merit enhanced consideration within the CWA framework, and which currently can, at most, be addressed as a transport pathway, include; aggregate extraction activities below the water table, construction and development activities (e.g., underground parking levels) penetrating into the water table, geothermal heating and cooling systems, potentially underground waste storage facilities, etc.

Policies addressing transport pathways are limited to stewardship programs, best

management practices, pilot programs, research, and specify actions (O. Reg. 287/07, Section 27). They are for the most part reactive, and cannot proactively prevent, or minimize effects on the vulnerability of an area around a well/intake.

To be able to proactively address activities that affect the vulnerability of a well or intake, amendments to the CWA would be necessary to allow a wider range of policies to be included in the Source Protection Plan, e.g., Planning Act policies and potentially Part IV policies.

The procedural mechanisms for making sure building and development applications would be captured to be compliant with any new source protection plan policies addressing transport pathways, i.e., S.59 notice process, are already in place. Additional measures may need to be considered to ensure no relevant activities are missed. Additional measures/processes may need to be considered to ensure activities not captured under the Planning Act, i.e., not needing a building permit or development application, and that could affect the vulnerability, are captured and can be addressed.

Updating the CWA to address not only activities that can discharge chemicals and pathogens, but to include a framework to address activities that could affect the vulnerability of a well or intake, may mean a significant shift and change in the conceptual framework, but it is an important change to have a more proactive approach in protecting drinking water resources.

## **Specific Comments on the Proposed Director Technical Rules**

### Part I.4 - Uncertainty analysis

#### *Rule 13 (5)*

LER Source Protection staff would like the MECP to provide clarification on why the vulnerability scores were removed from Significant Groundwater Recharge Areas (SGRAs). With vulnerability scores removed from SGRAs, the ability to have low and moderate water quality policies in SGRAs no longer exists. Given that SGRAs are areas where groundwater recharge is higher, activities on the ground surface have an increased likelihood of impacting underlying aquifers and should be able to be addressed. The MECP stated that SGRAs are vulnerable areas related to water quantity only. Could the MECP please comment on whether water quantity policies could be developed to address threats in SGRAs.

### Part I.5 – Alternate Methods or Approaches

#### *Rule 15.1 (4)*

Lake Erie Region Source Protection staff support the proposed changes to this rule; however, staff would like clarification on when in the process the notice to the Director is expected by the MECP.

## Part I.6 – Climate Consideration

### *Rule 15.3*

The MECP has indicated that the Source Protection Authority (SPA) may use staff hours to consult and discuss with municipalities to identify where a Climate Impact Assessment (CIA) may be warranted, and has clarified that the decision to undertake a CIA is a local decision. This essentially means a CIA would need to be undertaken with municipal funding. LER Source Protection staff support the proposed changes to this rule with respect to the necessary documentation and information that needs to be included in an assessment report. However, if a CIA is undertaken by a municipality, LER Source Protection staff will require MECP support/funding to support the discussions with municipal staff, support the Climate Impact Assessment process, and write up of the assessment report information.

## Part II – Watershed Characterization

### *Rule 16 (9) (b)*

See comments for Rule 47 (7)

### *Rule 16 (11)*

LER Source Protection staff support the proposed changes to Rule 16 (11). Impacts from road salt is an increasing threat to many drinking water sources. Staff understand that the proposed amendment allows the calculation of percentages of imperviousness in a vulnerable area as a whole, or in a sub-area within the vulnerable area, where the road salt is applied.

Staff also understand that the new rules, once finalized, would only apply to calculations necessary for new or expanded systems, but would not automatically apply to existing systems. In addition, the MECP has indicated that updating calculations for existing systems is a local decision. This essentially means that the system owner (municipality) is responsible for undertaking this work.

LER staff are concerned that this approach may result in many different approaches used, both for existing vs. new systems, and from one municipality to another, which may lead to an inconsistent assessment across the watershed. While locally different approaches do exist now on the Lake Erie Region, conservation authority staff would in many cases be able to undertake the necessary work more efficiently and consistently across the watershed.

### Part V.3 - Delineation of wellhead protection areas, type I systems

#### *Rule 47 (7)*

LER Source Protection staff support the proposed changes and understand that a WHPA-ICA can now be considered a standalone vulnerable area. Staff also understand that "evidence of contribution" to the Issue identified has to be presented in the assessment report. Further clarification is needed on what "evidence of contribution" means and what level of information and data is required. The MECP should consider providing guidance to ensure ministry expectations are being met, being mindful of the level of data and technical assessment that may be needed.

#### *Rule 48 (7)*

See comments for Rule 47(7).

#### *Rule 78.1 (1&2)*

See comments for Rule 47(7).

### Part XI.1 - Describing drinking water issues

#### *Rule 115 (3)*

See comment for Rule 47(7).

### Part XI.2 - Listing drinking water threats - Activities

#### *Rule 119*

Lake Erie Region Source Protection have concerns with the proposed changes to this rule. The proposed changes assumes that provincial and federal instruments adequately address source water protection concerns. Staff understand that the reason for this proposed change is to avoid regulatory duplication and to ensure that only locally relevant threats are applied for. Staff submit that this can already be achieved through the current wording of the rule, as the MECP has to approve a local threat application by providing the chemical or pathogen hazard rating of the activity. However, the proposed wording unnecessarily restricts activities from being able to be considered as a local threat, for example, where there may be a gap in the provincial regulatory framework managing the activity to address source protection matters.

### Part XI.5 - Identifying areas for significant, moderate and low drinking water threats – Conditions

#### *Rule 139 and 141*

LER Source Protection staff have concerns with the proposed rule changes and would like additional clarification on the underlying reason for the proposed wording change from “*the condition is causing off site contamination*” to “*the contamination is migrating towards the well or intake*”. Staff are concerned that this is not only an editorial change, as has been suggested by MECP staff, as the proposed change seems to result in unintended consequences when identifying Conditions including the level of evidence needed for identifying a Condition, and the proposed level of work needed to re-assess existing Condition sites.

Under the current rules, the use of the term “off site contamination” means the *presence* of contamination on a property other than the property that is the source of the contamination provides the evidence needed for meeting rules 139 (1) and 141 (4). With the proposed new wording, evidence needs to be provided that the contamination is *moving*, irrespective of property boundaries, towards the well or intake. This would necessitate more comprehensive studies to be carried. Providing the evidence needed for identifying if contaminants are moving towards a well or intake can be very challenging and expensive, especially in conditions like fractured bedrock. Staff are also concerned about the level of evidence or threshold that is needed to prove contamination is moving towards a well or intake. MECP should clarify the type of evidence needed and determine the availability of this evidence to undertake the assessment.

The proposed new wording may also result in contaminated sites inadvertently not being able to be identified as Condition sites. For example, a contaminated site with a pump and treat system may stop the plume from migrating and the site would therefore not be able to be identified as a Condition site with the new wording. However, one of the principles of the source protection program and its risk assessment approach is that risk management measures (in this case the pump and treat system) should not be considered when identifying threats/conditions.

## **Comments on the Proposed Amendments to the Tables of Drinking Water Threats**

LER Source Protection staff have the following comments on the Proposed Amendments to the Tables of Drinking Water Threats.

### General

LER Source Protection staff ask that the MECP provide direction and guidance on the following concerns with the proposed amendments to the Tables of Drinking Water Threats:

- Specific timelines for compliance with the amendments to the Tables of Drinking

Water Threats,

- Details on which amendments and associated technical work and analysis will be funded under the Drinking Water Source Protection program, and
- For changes that are mandatory, who (conservation authorities or municipalities) will be required to complete the work and how the work will be funded.

#### Application, Storage and Handling of Road Salt

LER Source Protection staff support the proposed amendments to the application, storage and handling of road salt drinking water threats. Staff would also like to emphasize the importance of discussions on the broader matters of the liability framework, insurance, training and salt application and storage by third party contractors moving forward.

#### Storage of Snow

LER Source Protection staff support the proposed amendments to the storage of snow drinking water threat; however, staff would like to point out that without a lower limit for snow storage, an extensive review of policies addressing snow storage may be required. Staff would like clarification on the reasoning for no lower limit of snow storage.

#### Handling and Storage of DNAPLs

LER Source Protection staff have concerns with the proposed solution to the handling and storage of DNAPLs, specifically the use of Table 2 from O. Reg. 153/04 to assist in identifying DNAPL activities. We understand that the proposed List 1 of the Director's Technical Rules includes land uses/activities that do not necessarily handle or store DNAPLs and that there are activities that handle or store DNAPLs that are not on the list. List 1 is therefore of limited use without additional technical guidance. Staff understand that List 1 is optional; however, we suggest the MECP develop guidance to clarify the use of List 1 and more specifically aid in the identification of DNAPL threats to minimize inconsistencies in interpretation.

#### Waste Generating Facilities

LER Source Protection staff are concerned that waste oil sites are not included in the list of waste generating facilities under the proposed new circumstances. Staff understand that waste oil tanks are often in bad shape and under O. Reg. 347 the only requirement is to make sure the tanks are pumped out by an approved waste hauler. There are no regular MECP inspections of secondary containment, spill plans and response kits unless there is a complaint. Waste oil tanks should be able to be identified as significant drinking water threats in an area with a vulnerability score of 10, so that Risk Management Plans can be established and these activities managed.

Staff are also concerned that, according to MECP staff explanation, while unused DNAPL products are dealt with as a DNAPL, used DNAPL products; however, are supposed to be dealt with as waste oil, and could therefore not be addressed with the new proposed circumstances.

## **Additional Comment on Drinking Water Threats Tables**

### PFOA and PFOS

Perfluorooctanoic acid (PFOA) and perfluorooctanesulphonate (PFOs) are not identified in the current Threats Circumstances Tables. LER Source Protection staff ask the MECP to consider past activities associated with PFOA/PFOS to be identified as a drinking water threat under the CWA.

### Application of Pesticides

To be able to manage pesticide use in a WHPA-A, pesticide chemicals (Atrazine, Dicamba, Dichlorophenoxy Acetic Acid (2,4-D), MCPA (2-methyl-4-chlorophenoxyacetic acid ), MCPB (4-(4-chloro-2-methylphenoxy)butanoic acid), Mecoprop, Metalaxyl, Metolachlor or s-Metolachlor) should all be made significant threats in a WHPA-A regardless of the area of application. Currently, the minimum area of application required for a significant threat is 10ha which is larger than the area within a WHPA-A (3.14ha), hence currently pesticide use cannot be a significant drinking water threat in a WHPA-A.

Thank you for the opportunity to provide comments on the proposed amendments to the Director's Technical Rules under the *Clean Water Act, 2006*. Please don't hesitate to reach out to the undersigned should you wish to discuss any of the above comments.

Regards,



Martin Keller  
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Lake Erie Source Protection Region